



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,741	11/20/2003	David G. Conroy	MSFT121951	8709
26380 7590 09/22/2008 CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347				
EXAMINER				
KEEFE, MICHAEL E				
ART UNIT		PAPER NUMBER		
2154				
MAIL DATE		DELIVERY MODE		
09/22/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/717,741

**Applicant(s)**

CONROY ET AL.

**Examiner**

MICHAEL E. KEEFER

**Art Unit**

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This Office Action is responsive to the Amendment and RCE filed 7/1/2008.

Claims 1-30 are pending.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**Claim 11**, which is directed to a computer readable medium comprising a data structure. This subject matter is not limited to that which falls within a statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. Instead, it includes a data structure. Data structures do not fall within a statutory category since they are clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

**Claims 12-15**, which depend from claim 11 do not correct the deficiencies of claim 11 and thus are rejected for the same.

***Claim Rejections - 35 USC § 102***

3. Claims 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuzma (US 5781901).

Regarding **claim 11**, Kuzma discloses:

A computer-readable medium having a customizable, tag-based data structure stored thereon for use by a networked system to process the act of sending information by reference, the data structure comprising:

a header tag that is indicative of control information, (a header tag is inherent in the HTTP protocol)

the header tag including a service tag that is indicative of a service for representing a buffer, the service tag including a URI attribute that is indicative of a URI of the service representing the buffer and an identifier attribute that is associated with the service tag; and (A service tag (i.e. a request-URI tag is inherent in a http request/response, as is a content-type tag)

a body tag that is indicative of data information, the body tag being capable of using the identifier attribute to refer to service representing the buffer. (A service tag (i.e. a request-URI tag is inherent in a http request/response, as is a content-type tag)

Regarding **claim 12 as applied to claim 11**, Kuzma discloses:

further comprising a host tag that is indicative of the host at which the buffer resides. (a host tag is inherent in any IP message (i.e. a to or from field))

Regarding **claim 13 as applied to claim 11**, Kuzma discloses:

further comprising a port tag that is indicative of a network port through which network communication occurs. (a port tag is inherent in any IP message (i.e. a to or from field))

Regarding **claim 14 as applied to claim 11**, Kuzma discloses:

further comprising a contract tag that is indicative of a contract for defining one or more behaviors of the service representing the buffer. (the contract tag is included in the http messages inherently as the encryption and/or compression methods suggested in Col. 14 lines 10-18)

Regarding **claim 15 as applied to claim 11**, Kuzma discloses:

further comprising a steering tag that is indicative of a steering tag associated with a physical address of the buffer and a length tag that is indicative of the length of the buffer. (the steering tag is the URI, and the length of the URI is inherently given in the packet)

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-10, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuzma in view of Bavadekar (US 2003/0009571).

Regarding **claim 1**, Kuzma discloses:

A networked system, comprising:

a message sender for sending a customizable, tag-based message, which includes a reference to a first buffer; (Fig. 7, steps 701-704, email is a customizable tag-based message, and a url is a reference to a buffer)

and a message receiver for receiving the customizable, tag-based message, the message receiver being capable of processing the reference in the customizable, tag-based message to cause either a piece of information stored in the first buffer to transfer to a second buffer or a piece of information stored in the second buffer to transfer to the first buffer. (Fig. 7 step 705-707 discloses a receiver processing the url and retrieving the file from the sender's buffer, inherently moving it to another (second) buffer.)

Kuzma discloses all the limitations of claim 1 except for the case where the reference to the buffer sent is intended to be the destination of data to be sent to.

The general concept of including a reference to a buffer to which data is to be sent in a message is well known in the art as taught by Bavadekar. (see at least paragraph 90, which discloses a request for data being sent to a server, as the data is properly returned to the requestor, a place to send the data must inherently be included in the request.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Kuzma with the general concept of including a reference to a buffer to which data is to be sent in a message as taught by Bavadekar in order to provide reliable full duplex virtual connections between entities.

Regarding **claim 2, as applied to claim 1**, Kuzma discloses:

wherein the customizable, tag- based message includes a body element for containing data, the body element including the reference to the first buffer.

(Fig. 6, item 625)

Regarding **claim 3 as applied to claims 1-2**, Kuzma discloses:

wherein the reference includes a uniform resource identifier. (Fig. 6, item 627)

Regarding **claim 4 as applied to claims 1-3**, Kuzma discloses:

wherein the customizable, tag-based message includes a header element for containing control information. (the message must inherently include a header specifying to whom the message is being sent (i.e. control information)

Regarding **claim 5 as applied to claims 1-4**, Kuzma discloses:

wherein the customizable, tag-based message is sent from the message sender to the message receiver via a customizable, tag-based protocol. (http is a customizable, tag-based protocol, Fig. 6, 610 and 620)

Regarding **claim 6**, Kuzma discloses:

A networked system, comprising:

a message sender for sending a customizable, tag-based message, which includes a reference to a first buffer; (Fig. 7, steps 701-704, email is a customizable tag-based message, and a url is a reference to a buffer)

an intermediary for intercepting the customizable, tag-based message;  
and (an intermediary is disclosed in Col. 8, that an intermediary post office may

instead buffer or unbuffer the data as it sees fit based off of network resources available)

a message receiver for receiving the customizable, tag-based message from the intermediary, the message receiver being capable of processing the reference in the customizable, tag-based message to cause either a piece of information in another buffer to transfer to a second buffer or a piece of information stored in the second buffer to transfer to the another buffer. (Fig. 7 step 705-707 discloses a receiver processing the url and retrieving the file from the sender's buffer, inherently moving it to another (second) buffer.)

Kuzma discloses all the limitations of claim 6 except for the case where the reference to the buffer sent is intended to be the destination of data to be sent to.

The general concept of including a reference to a buffer to which data is to be sent in a message is well known in the art as taught by Bavadekar. (see at least paragraph 90, which discloses a request for data being sent to a server, as the data is properly returned to the requestor, a place to send the data must inherently be included in the request.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Kuzma with the general concept of including a reference to a buffer to which data is to be sent in a message as taught by Bavadekar in order to provide reliable full duplex virtual connections between entities.

Regarding **claim 7 as applied to claim 6**, Kuzma discloses:



wherein the customizable, tag- based message includes a header element that contains the reference to the first buffer, the header element further containing an attribute that is associated with the reference to the first buffer. (it is inherent for an http message (Fig. 7) to include a header field that identifies the type of data carried in the http packet.)

Regarding **claim 8 as applied to claims 6-7**, Kuzma discloses:

wherein the customizable, tag- based message includes a body element that uses the attribute to refer to the first buffer. (Fig. 7, URL 627)

Regarding **claim 9 as applied to claims 6-8**, Kuzma discloses:

wherein the intermediary is capable of creating a staging buffer from the customizable, tag-based message, the intermediary being further capable of processing the reference in the customizable, tag-based message to create a staging buffer, and causing either a piece of information stored in the staging buffer to transfer to the first buffer or a piece of information stored in the first buffer to transfer to the staging buffer. (Col. 8 lines 29-46 disclose that the intermediary post office can store an attachment and forward only the email with a link, or retrieve an attachment and forward the full attachment with the email.)

Regarding **claim 10 and as applied to claims 6-9**, Kuzma discloses:

wherein the another buffer of the message receiver is selected from a group consisting of the first buffer and the staging buffer. (it is inherent that the recipient of the email may retrieve the attachment from wherever the link points

to, whether that is to a local storage at a sender, or the storage at an intermediary post office.)

Regarding **claim 16**, Kuzma discloses:

A networked system, comprising:

a central processing unit; (this is inherent in a server)

a piece of memory that includes a first buffer; (the location where a file is stored in memory is inherently a buffer) and

a network interface card that is capable of processing a reference in a customizable, tag-based message to cause either a piece of information stored in the first buffer to transfer to another buffer or a piece of information stored in the another buffer to transfer to the first buffer without requiring the central processing unit to execute copy instructions. (Fig. 7 step 705-707 discloses a receiver processing the url and retrieving the file from the sender's buffer, inherently moving it to another (second) buffer. Lines 30-50 disclose that the attachment is automatically retrieved from the server (i.e. buffer))

Kuzma discloses all the limitations of claim 16 except for the case where the reference to the buffer sent is intended to be the destination of data to be sent to.

The general concept of including a reference to a buffer to which data is to be sent in a message is well known in the art as taught by Bavadekar. (see at least paragraph 90, which discloses a request for data being sent to a server, as the data is properly returned to the requestor, a place to send the data must inherently be included in the request.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Kuzma with the general concept of including a reference to a buffer to which data is to be sent in a message as taught by Bavadekar in order to provide reliable full duplex virtual connections between entities.

Regarding **claim 17 as applied to claim 16**, Kuzma discloses:

further comprising a session service for associating an address of the first buffer with a steering tag created by the network interface card. (This is inherent in the http GET message that is sent to the server that holds the data)

Regarding **claim 18 as applied to claims 16-17**, Kuzma discloses:

further comprising a session manager service for creating the session service and for destroying the session service once the transfer of the piece of information is completed. (it is inherent for an http session to be managed by a session service that creates and destroys the session.)

Regarding **claim 19 as applied to claims 16-18**, Kuzma discloses:

further comprising a sender service for originating the customizable, tag-based message, the sender service invoking the session manager service to initiate the transfer of the information. (the sender service is disclosed in Fig. 7, steps 701-704, email is a customizable tag-based message, and a url is a reference to a buffer)

Regarding **claim 20 as applied to claims 16-19**, Kuzma discloses:

wherein the customizable, tag-based language message associates the steering tag with a URI of the session service. (it is inherent that the URI of the

file would have to be matched with the steering tag in the HTTP get message to retrieve the file.)

6. Claims 21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuzma in view of Monaco et al. (US 6314402), hereafter Monaco.

Regarding **claims 21 and 26**, Kuzma discloses:

A computer-implemented method for sending by reference in a customizable, tag-based protocol, the computer-implemented method comprising:

preparing a customizable, tag-based message to include a transfer context, the transfer context including a reference to a first buffer for storing a piece of information without having to embed the piece of information in the customizable, tag-based message; and (Fig. 7, steps 701-704, email is a customizable tag-based message, and a url is a reference to a buffer)

sending the customizable, tag-based message to the network. (Fig. 7, 704)

Kuzma discloses all the limitations of claims 21 and 26 except for the protocol being XML.

The general concept of using XML as a network protocol is well known in the art as taught by Monaco. (see Col. 20 lines 40-58)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Kuzma with the general concept of using XML as a network

protocol as taught by Monaco in order to provide conformance to industry standards and future extensibility.

Regarding **claims 22 and 27 as applied to claims 21 and 26** Kuzma discloses:

wherein the act of preparing includes associating a steering tag with an address of a first buffer that is capable of storing the piece of information. (A URL, (Fig. 6, 627) is a steering tag with an address)

Regarding **claims 23 and 28 as applied to claims 21-22 and 26-27**, Kuzma discloses:

wherein the act of preparing includes creating an attribute in the transfer context, which is capable of being used as an indirection in a body element of the customizable, tag-based message to refer to the first buffer. (The URL 627 is an attribute that is shown in the body of the email which refers to the buffer.)

Regarding **claims 24 and 29 as applied to claims 21-23 and 26-28**, Kuzma discloses:

further comprising an act of intercepting the customizable, tag-based message by an intermediary to create a staging buffer to mediate between two nodes. (an intermediary is disclosed in Col. 8, that an intermediary post office may instead buffer or unbuffer the data as it sees fit based off of network resources available)

Regarding **claims 25 and 30 as applied to claims 21-24 and 26-29**, Kuzma discloses:

further comprising receiving the customizable, tag-based message, the act of receiving processing the reference to cause a transfer of the piece of information to or from the first buffer at one node to or from another buffer at another node without having a central processing unit to execute a copy instruction. (Col. 8 lines 29-46 disclose that the intermediary post office can store an attachment and forward only the email with a link, or retrieve an attachment and forward the full attachment with the email.)

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-10 and 16-30 have been considered but are moot in view of the new ground(s) of rejection.
8. The Examiner notes that no arguments were made regarding the patentability of claims 11-15 in view of the rejection under 35 U.S.C. 102(b).
9. Regarding the rejection of claims 11-15 under 35 U.S.C. 101, the examiner notes that despite Applicant's amendments the data structure presented in these claims is still non-functional descriptive material. The tags listed do not perform any actual functions, they are merely sets of data.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL E. KEEFER whose telephone number is (571)270-1591. The examiner can normally be reached on Monday through Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 9/13/2008

/Joseph E. Avellino/  
Primary Examiner, Art Unit 2146